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10/058,029

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Yoshiyuki Sasaki

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EXAMINER

ORTIZ CRIADO, JORGE L

ART UNIT

PAPER NUMBER

2627

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/058,029	<b>Applicant(s)</b> SASAKI, YOSHIYUKI	
	<b>Examiner</b> JORGE L. ORTIZ CRIADO	<b>Art Unit</b> 2627	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04/13/2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

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## **DETAILED ACTION**

### ***Response to Arguments/Amendments***

Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection. Applicant comments/amendments to the claims, specification and drawings have been considered with the following office action results.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 8, 9, and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hashimoto U.S. patent No. 6,172,955 in view of Horie J.P. Publication No. 2000-011380.

Regarding claims 1 and 18, Hashimoto discloses in a method and “computer program” (See col. 12, lines 3-12), of storing data in recording media using an information storage apparatus which has plurality of rotation modes of said recording media (See col. 6, lines 12-62; Figure 1 ref# 5 “rotation control system”) comprising:

step of formatting said recording medium in a first rotation mode (interpreted as the rotation mode/speed/velocity which the rotation control system provides to rotates the disk that allows the storage apparatus to perform the formatting) (See col. 8, lines 20-57; Fig.5; Steps S12),

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a step of stopping, in response to a request for storing data in said recording media, formatting of said media (Fig. 5 S13-S14);

a step of setting said recording media in a second rotation mode that is suitable for storing data in said recording media (Figure 1 ref# 5 “interpreted as the rotation mode/speed/velocity which the rotation control system provides and controls the rotation of the disk at rotation mode/speed/velocity at the time of recording/reproducing, inherently has to be suitable for recording/reproducing in order to perform these processes of recording/reproducing”);

a step of storing data in said recording media in said second rotation mode (Fig. 5 Step 14);

a step of setting, in response to an end of storing data in said recording media, said recording media in said first rotation mode; a step of resuming formatting said recording media in said first rotation mode (Fig. 5, S14 to S15 loop to S12; as outlined above, at the rotation mode/speed/velocity which the rotation control system provides to rotates the disk that allows the storage apparatus to perform the formatting),

Hashimoto fails to disclose wherein the first rotation mode and the second rotation mode are different in recording speed.

However this feature is well known in the art as evidenced by Horie, which discloses an information storage apparatus and method for storing data in recording medium using an information storage apparatus, which has a plurality of rotation modes of said recording medium comprising a controller which formats said recording medium in a first rotation mode and sets

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the recording medium in a second rotation mode that is suitable for storing data, stores data in said recording medium in said second rotation mode and wherein said recording medium formatted in said first rotation mode is rotated at different and a maximum rotating speed at which said information storage apparatus can store data in said recording medium (See detailed description [0018]-[0029]; [0036]-[0038]; [0041]-[0042]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to rotate the medium at different speed and specifically that the first rotation mode/speed at a maximum rotating speed at which said information storage apparatus can store data in said recording medium in order to reduce amount of time that it takes to format the recording medium, as suggested by Horie.

Regarding claim 2 and 10, the combination above further shows that first rotation mode is rotated at a maximum rotating speed at which said information storage apparatus can store data in said recording medium (See Horie detailed description [0018]-[0029]; [0036]-[0038]; [0041]-[0042]).

Regarding claims 8 and 16, Hashimoto further discloses wherein said recording medium is a rewritable optical disc (See col. 6, lines 3-5).

Regarding claims 9 and 17, Apparatus claims 9 and 17 are drawn to the apparatus of performing the corresponding method claimed in claim 1. Therefore apparatus claims 9 and 17

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correspond to method claim 9 and are rejected for the same reasons of obviousness as used above.

Claims 3-4, and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hashimoto U.S. patent No. 6,172,955 in combination with Horie J.P. Publication No. 2000-011380 and further in view of Shirane J.P. Publication No. 07-262692.

Regarding claims 3 and 11, Hashimo in combination with Horie fails to disclose wherein said recording medium formatted in said first rotation mode is a constant linear velocity mode.

However, this feature is well known in the art as evidenced by Shirane, which discloses formatting a disk at a constant linear velocity to be reproduced in a storage apparatus, which has a plurality of rotation modes (See detailed description [0016]; [0021]-[0031]; [0082]).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to format the recording medium at a first rotation mode of constant linear velocity in order to further increase the storage capacity of the recording medium, as suggested by Shirane.

Regarding claims 4 and 12, Hashimo in combination with Horie fails to disclose wherein said recording medium formatted in said first rotation is a zone constant linear velocity mode.

However, this feature is well known in the art as evidenced by Shirane, which discloses formatting a disk at a zone constant linear velocity to be reproduced in a storage apparatus, which has a plurality of rotation modes (See detailed description [0016]; [0021]-[0031]; [0082]).

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Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to format the recording medium at a first rotation mode of zone constant linear velocity in order to increase the storage capacity of the recording medium and at the same time obtain a high speed access, as suggested by Shirane.

Claims 5-7 and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hashimoto U.S. patent No. 6,172,955 in combination with Horie J.P. Publication No. 2000-011380 and further in view of Seamons et al. U.S. Patent No. 4,924,327.

Hashimo in combination with Horie fails to disclose a step of measuring time and the step of resuming formatting is not performed until a predetermined period of time passes.

However, this feature is well known in the art as evidenced by Seamons et al., which discloses a method and an apparatus to perform the method for storing data in recording medium using an information storage apparatus including a step of formatting said recording medium; a step of stopping, in response to a request for storing data in said recording medium, formatting of said recording medium; a step of storing data in said recording medium; a step of setting, in response to an end of storing data in said recording medium, said recording medium in a rotation mode; and a step of resuming of formatting said recording medium. (See col. 5, lines 26-46).

(as in claims 5 and 13) a step of measuring time, in response to an end of storing data in said recording medium, wherein said step of resuming of formatting said recording medium is not performed until a predetermined period of time passes (See col. 5, lines 36-45).

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(as in claims 6 and 14) a step of measuring time, in response to an end of storing data in said recording medium, wherein formatting said recording medium is resumed in before a predetermined period of time passes (See col. 5, lines 45-60).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to resume formatting after a predetermined period of time as taught by Seamons et al., because waiting the period of time allows the system to process addition recording requests.

Furthermore, it would have been obvious to resume formatting before the predetermined period of time passes as taught by Seamons et al., because doing so allows the apparatus to start formatting if no formatted space is available for storing data.

Regarding claims 7 and 15, the combination of above, further shows wherein after said predetermined period of time passes, said recording medium is set in said first rotation mode (i.e. resuming of formatting said recording medium as provided in the combination the first rotation mode is utilized).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JORGE L. ORTIZ CRIADO whose telephone number is (571)272-7624. The examiner can normally be reached on Mon.-Fri 10:00 am- 6:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrea L. Wellington can be reached on (571) 272-4483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jorge L Ortiz-Criado/  
Primary Examiner, Art Unit 2627